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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/651,130

08/30/2000

Kent Malmgren

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09/18/2006

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EXAMINER

CHANG, VICTOR S

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/651,130

Applicant(s)

MALMGREN ET AL.

Examiner

Victor S. Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13,15 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13,15 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Introduction

1. Applicants' remarks filed on 8/8/2006 have been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn.

Rejections Based on Prior Art

4. Claims 1, 2, 4-13, 15 and 20 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chen et al. (US 6261679).

Chen's invention relates to an open-cell fibrous absorbent structure for use as absorbent articles, such as feminine care pads, diapers, etc., for the intake, distribution, and retention of human body fluids [col. 2, lines 5-49]. Any known cellulosic fibers, such as fibers derived from chitin, chitosan, starch, or other polysaccharides can be used [col. 7, lines 35-55]. The polymeric binder material for the absorbent structure may be rendered foamable at least in part due to the presence of foaming agents such as a surfactant by mechanical agitation [col. 11, line 47 to col. 12, line 5]. Suitable swellable binder materials include polysaccharides such as carboxymethyl celluloses, etc., and synthetic polypeptides such as polyaspartic acid, etc. [col. 12, line 31-45]. Cells defined by the foamable binder material can be about 3 mm or less; specifically about 1 mm or less, more specifically about 0.3 mm or less, still more specifically about 0.1 mm or less, and most specifically from about 0.02 mm to about 0.2 mm [col. 42, lines 33-38].

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For claims 1, 2, 4-6, 8-13, 15 and 20, Chen is silent about the absorbent properties of absorption rate, liquid distribution capacity, liquid storage capacity and gel liquid absorption. However, since Chen teaches an absorbent article of the same composition; formed by the same process of a) mixing fibers and binder resins [col. 11, lines 47-55; and col. 21, line 43 through col. 22, line 25], b) foaming by gas injection or mechanical agitation [column 16, lines 10-24], c) optionally incorporating a crosslinking agent [col. 29, line 20 through col. 31, line 34], d) molding foamed mixture [col. 26, lines 13-23], and e) freeze drying (col. 17, line 66 through col. 18, line 39) as the instant invention [see specification, pages 9 and 10]; having the same cell size in the binder material of about 3 mm or less, specifically about 1 mm or less, more specifically about 0.3 mm or less, still more specifically about 0.1 mm or less, and most specifically from about 0.02 mm to about 0.2 mm [col. 42, lines 33-38], as claimed in claim 1 of instant invention (a distribution of pore sizes between 0 and 3 mm); and for the same end use (absorbent article), suitable absorbent properties (absorption rate, liquid distribution capacity, liquid storage capacity and gel liquid absorption) are reasonably considered to be either anticipated by Chen, or are obviously provided by practicing the invention of the prior art. See MPEP § 2112.01.

For claim 7, Chen teaches that the absorbent structure may be used as diapers, incontinence articles, etc., which are inherently shaped to fit a wearer's specific area of three-dimensional body anatomy.

Response to Argument

5. Applicants argue [Remarks, page 3, 1st paragraph] that the Office simply mixed and matched steps from throughout the specification of Chen, and these steps are very generic and

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broadly stated, and lacks precise manner, timing, amounts, temperatures, concentrations, etc., of conducting the combined process steps, therefore following the steps could result in a huge variety of foams with a huge variety of properties which do not necessarily possess the presently claimed characteristics. However, applicants are reminded that none of the process details are being claimed in the claims. Further, since Chen's process steps teach the same general process steps disclosed in the specification of instant invention, the process related conditions (timing, amounts, etc.) are reasonably considered to be either anticipated by Chen, or obviously provided by practicing the invention of prior art. Applicants' assertion is unsupported and ignores the reasoning set forth by the Examiner in the grounds of rejection. There is no reason to believe that one skilled in the art would not be able to optimize a product made by the same process, and for the same end use. Applicants' attempt to analyze the disclosure in a vacuum and ignoring the skill of the art are unpersuasive.

Applicants' argue [Remarks, page 3] that the declaration of Malmgren filed 4/7/2006 shows that sample materials prepared according to the Example 3 of Chen do not possess the presently claimed characteristics, therefore the absorbent materials of Chen do not necessarily possess the presently claimed characteristics, and the results are unexpected. However, applicants are reminded that while the Declaration presents properties from samples made according to one (Example 3) of Chen's examples, nowhere is there a teaching by Chen that the invention is so limited. The Declaration fails to clearly point out any patentably distinct structure and/or composition features or limitations. Merely presenting properties of one single example clearly fails to exclude the general teachings of Chen as being necessarily lacking the desired absorbent properties, because these properties are reasonably considered to be either anticipated,

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anticipated, or at least an obvious matter of routine optimization of the pore size and distribution, as set forth above. Finally, applicants' argument that the results are unexpected is also unpersuasive, because the data shown in Declaration shows that even under the same conditions of Example 3, the results vary over a wide range, with some of them read upon the instantly claimed range, and Applicants fail to provide any evidence that the absorbent properties of Chen's products necessarily cannot be optimized.

Applicants' argue [Remarks, page 5] that Chen is focused on storing capillary liquid, and one skilled in the art would not be motivated and is not taught how to incorporate satisfactory gel liquid storage. However, applicant is reminded that the specification defines these terms as "Gel liquid refers to liquid held in pores smaller than 3 mm and capillary liquid refers to loosely bound liquid in pores larger than 3 mm and up to 500 mm" [specification, page 5, second paragraph from the bottom]. Clearly, they are merely liquids of the same composition being absorbed in pores of different ranges of sizes. Since Chen's absorbent article anticipates all the structure and composition limitations as claimed, in particular, the Chen teaches progressive smaller pore sizes as claimed, Chen's article is inherently capable of absorbing both the capillary liquid and gel liquid. Applicants' argument to the contrary is unpersuasive.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VSC
Victor S Chang
Examiner
Art Unit 1771


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